

REMARKS/ARGUMENTS

Claims 8, 16-17, 28 and 31 have been amended by this Response. Claims 27 and 30 have been cancelled. Claims 1-7, 10-13, 19-21 and 26 have been previously cancelled. Claims 8-9, 14-18, 22-25, 28-29 and 31-32 are currently pending in this application and are at issue herein.

§ 103 Claim Rejections

Claim 8-9, 14-18, 22-25, 28-29 and 31-32 stand rejected under § 103(a) as obvious over U.S. Publication No. 2002/0184357 to Traversat et al. ("Traversat") in view of U.S. Patent No. 6,065,062 to Periasamy et al. ("Periasamy"). Applicants respectfully traverse the claim rejections for at least the following reasons.

Burden Of Proving Obviousness Under § 103

"All words in a claim must be considered in judging the patentability of that claim against the prior art." MPEP § 2143.03 (*emphasis added*). "When evaluating claims for obviousness under 35 U.S.C. 103, **all the limitations of the claims must be considered and given weight.**" MPEP § 2143.03 (*emphasis added*). "If an independent claim is nonobvious under 35 U.S.C. 103, then any claim depending therefrom is nonobvious." Id. "A 35 U.S.C. 103 rejection is based on 35 U.S.C. 102(a), 102(b), 102(e), etc. depending on the type of prior art reference used and its publication or issue date." MPEP § 2141.01.

To establish a *prima facie* case of obviousness, an Examiner must show that an invention would have been obvious to a person of ordinary skill in the art at the time of the invention. MPEP § 2141. "Obviousness is a question of law based on underlying factual inquiries." Id. The factual inquiries enunciated by the Court include "ascertaining the differences between the

claimed invention and the prior art" and "resolving the level of ordinary skill in the pertinent art."
MPEP § 2141.

"A statement that modifications of the prior art to meet the claimed invention would have been 'well within the ordinary skill of the art at the time the claimed invention was made' because the references relied upon teach that all aspects of the claimed invention were individually known in the art is not sufficient to establish a *prima facie* case of obviousness without some objective reason to combine the teachings of the references." MPEP § 2143.01. "[R]ejections on obviousness cannot be sustained by mere conclusory statements; instead, **there must be some articulated reasoning with some rational underpinning to support the legal conclusion of obviousness.**" KSR International Co. v. Teleflex Inc., 550 U.S.398, 419, 82 USPQ2d, 1385, 1396 (2007) (*citing In re Kahn*, 441 F.3d 977, 988, 78 USPQ2d 1329, 1336 (Fed. Cir. 2006) (*emphasis added*)); MPEP § 2143.01.

For instance, an invention that permits the omission of necessary features and a retention of their function is an indicia of nonobviousness. In re Edge, 359 F.2d 896, 149 USPQ 556 (CCPA 1966); MPEP § 2144.04. A conclusory statement to the contrary is insufficient to rebut such an indicia of nonobviousness. *See* MPEP § 2143.01.

Moreover, "[i]f the proposed modification or combination of the prior art would change the principle of operation of the prior art invention being modified, then the teachings of the references are not sufficient to render the claims *prima facie* obvious." MPEP § 2143.01. Also, "the proposed modification cannot render the prior art unsatisfactory for its intended purpose." MPEP § 2143.01.

Claims 8-9, 14-18, 22-25, 28-29 and 31-32

Independent claim 8, as amended, recites *"wherein each of the communication components searches for neighboring ones of the communication components and creates a servant list of the neighboring communication components; and wherein each of the communication components maintains the current utilization level of each server functionality of the neighboring communication components in the servant list by performing a repeating search at timed intervals."*

Similarly, independent claim 16, as amended, recites *"wherein each of the communication components searches for neighboring ones of the communication components and creates a servant list of the neighboring communication components; and wherein each of the communication components maintains the current utilization level of each server functionality of the neighboring communication components in the servant list by performing a repeating search at timed intervals."*

Neither Traversat nor Periasamy, taken alone or in combination, disclose or suggest these claim limitations.

The above limitations were previously present in dependant claims 27 and 30, and were written into independent claims 8 and 16, respectively. Dependant claims 27 and 30 were rejected for the same reasons in the Office Action. Therefore, the arguments made herein apply equally to amended independent claims 8 and 16.

The Office Action cites paragraphs [0083] and [0176] of Traversat as allegedly disclosing the above limitations. However, both of these paragraphs of Traversat recite very generic and vague functionality that in no way discloses the claimed limitations. Additionally, and as indicated in the Office Action, Applicants have considered both the Traversat and Periasamy

references in their entireties as potentially teaching the claimed invention. Neither does, whether taken alone or in combination.

The Office Action equates the "peer monitoring 128" primitive of Traversat paragraph [0083] and a disclosure of low-cost information search and indexing of Traversat paragraph [0176] as disclosing the afore-mentioned claim limitations. However, the Office Action fails to provide any articulated reasoning with some rational underpinning to support the legal conclusion of obviousness, as required by KSR International Co. v. Teleflex Inc., 550 U.S.398, 82 USPQ2d 1385 (2007).

Paragraph [0176] of Traversat simply recites: "Simple, low-cost information search and indexing using a content shared service." Traversat further discloses that the peer monitoring 128 primitive "enables control of the behavior and activity of peers in a peer group and can be used to implement peer management functions including access control, priority setting, traffic metering, and a bandwidth balancing." (Traversat, para. [0083]). Both of these disclosures are simply generic descriptions of a minimal primitive that is common to peer-to-peer networking. For example, Traversat confirms that peer monitoring 128 is simply a minimal primitive common to peer-to-peer networking in paragraph [0079], which states:

In one embodiment, the peer-to-peer platform may include a core layer 120 that defines and encapsulates minimum primitives that are common to peer-to-peer networking, including, but not limited to, peers 110, peer groups 122, peer discovery 124, peer communication (e.g. pipes) 126, peer monitoring 128, and associated security primitives 130.

While Traversat may disclose basic functionality of the peer monitoring 128 primitive, it is devoid of any teaching or suggestion of how the peer monitoring 128 primitive performs any functionality to accomplish the basic disclosed tasks.

In contrast, the claim limitations of independent claims 8 and 16 are clear that each of the communication components:

- 1. Searches for neighboring ones of the communication components;*
- 2. Creates a servant list of the neighboring communication components; and*
- 3. Maintains the current utilization level of each server functionality of the neighboring communication components in the servant list by performing a repeated search at timed intervals.*

In the Figure of the present application, the above-identified claim limitations operate as follows. When component A1 performs the claimed limitations, component A1 creates a servant list of its neighboring communication components, which consist of components A2, A3, A4, B3, B4, B5 and B6. That is how a "neighboring" component is described in the application, namely, one that it is connected directly to another component. Component A1 would not create a servant list including component B10, as that component is more than one "hop" or "jump" away from component A1, and is not a neighboring component of component A1. Then, component A1 maintains the current utilization level of each server functionality of its neighboring components which are included in the servant list by performing repeated searches at timed intervals. In this manner, say component B6 became disabled, during a repeated search at the timed interval component A1 would note the absence of component B6 and would update its servant list accordingly.

Similarly, when component B3 performs the claimed limitations, it creates a servant list of its neighboring components, including component A1 and component B10, as these are the components that are connected directly to component B3. Component B3 would not create a servant list including components A3, A2 or A4, as these components are more than one "hop"

or "jump" away from component B3, and are not neighboring components of component B3.

Then, component B3 maintains the current utilization level of each server functionality of its neighboring components which are included in the servant list by performing repeated searches at timed intervals. In this manner, the present invention enables each component to create lists of neighboring communication components to speed up subsequent search operations for resources.

Conversely, Traversat is devoid of any teaching or suggestion of searching neighboring communication components to create servant lists, and updating those servant lists with the current utilization level of each server functionality at timed intervals. A peer group in Traversat may be infinite. Traversat makes no distinction between neighboring components and other components. For example, at paragraph [0082], Traversat states that "[a] peer group may theoretically be as large as the entire collected universe." It is for this reason that while query messages may be forwarded from one rendezvous node, or peer, to another, Traversat implements a "time-to-live", or time-out parameter to limit query forwarding. This is because a search query can be propagated in Traversat so many times that it is repeated exponentially. This is due to the peer group in Traversat being as large as any connected universe. For example, with respect to the time-to-live parameter, paragraph [0028] of Traversat states:

Each discovery query message may include a time-to-live (TTL) indicator. TTL's may also help limit the propagation of requests within the network. The TTL may indicate a length of time during which the resource advertisement is valid. The rendezvous nodes receiving the discovery query message may decrement the time-to-live indicator to reflect the current time-to-live. When the TTL expires, the discovery query message may be deleted or invalidated.

In contrast, the present invention queries only neighboring components to create a servant list. Components that are not neighboring, in the sense as used in the present application, will

not be queried, but will be included in other components' servant lists for which they are a "neighbor". The servant lists are updated to reflect the current utilization level of each server functionality of the neighboring communication components by performing a repeated search at timed intervals. The Office Action ignores these limitations and does not provide the requisite reasoning and rationale to support an obviousness rejection.

To support an obviousness rejection, MPEP § 2143.03 requires that "[a]ll words in a claim must be considered in judging the patentability of that claim against the prior art." Further, MPEP § 2141.02 requires "interpreting the claim language, and considering both the invention and the prior art references as a whole." "[R]ejections on obviousness cannot be sustained by mere conclusory statements; instead, **there must be some articulated reasoning with some rational underpinning to support the legal conclusion of obviousness.**" KSR International Co. v. Teleflex Inc., 550 U.S.398, 419, 82 USPQ2d, 1385, 1396) (2007) (*citing In re Kahn*, 441 F.3d 977, 988, 78 USPQ2d 1329, 1336 (Fed. Cir. 2006) (*emphasis added*)); MPEP § 2143.01. Because the Office Action does not specifically address the claim limitations of independent claims 8 and 16 discussed above, the obviousness rejection is improper and should be withdrawn.

Accordingly, for at least those reasons articulated above, independent claims 8 and 16 are believed allowable over the prior art.

Dependent claims 9, 14-15, 28-29 and 17-18, 22-25, 31-32 depend cognately from independent claims 8 and 16, respectively, and add further structural detail which further delineate the present invention over the prior art. These dependent claims are believed allowable given at least the distinctions identified above, and a separate discussion of them will not be belabored for the sake of brevity.

Conclusion

In summary, neither Traversat nor Periasamy, taken along or in combination, disclose or suggest communication components searching for neighboring communication components and creating a servant list of the same, and maintaining the current utilization level of each server functionality of the neighboring communication components in the servant list by performing a repeated search at timed intervals. Reconsideration of the rejection is respectfully requested.

Applicants note that they have not amended the claims to include any new limitations but, rather, have simply taken limitations from dependent claims 27 and 30 that were previously examined and included them in independent claims 8 and 16, respectively. Thus, the claim amendments made herein do not require any further searching.

For at least the reasons identified above, Applicants submit that pending claims 8-9, 14-18, 22-25, 28-29 and 31-32 are allowable over the prior art. Allowance and passage to issue are respectfully requested. Early notification to that effect is respectfully requested.

It is believed that this Response requires no fee. However, if a fee is required for any reason, the Commissioner is hereby authorized to charge Deposit Account No. 02-4800 the necessary amount.

Should any issues remain, the Examiner is invited to contact the undersigned at the number listed below to advance prosecution of the case.

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The Examiner is respectfully requested to address all future communications in this case to the undersigned at the address below.

Respectfully submitted,

/Bryan H. Opalko/

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